

Application No.: 10/718,897

Docket No.: JCLA11797

AMENDMENT

In The Claims:

Claims 1-14 (cancelled)

Claim 15. (currently amended) A structure of metal interconnects, comprising:
a first dielectric layer, having a first opening therein;
a first metal layer, formed in the first opening; and
a first protective layer, formed on the surface of the first metal layer not covered by the first dielectric layer, wherein the first protective layer is formed from a mixture of the first metal layer and a first film layer, and the first film layer is reactive with the first metal layer but non-reactive with the first dielectric layer, and a top surface of the first dielectric layer around the first opening is exposed.

Claim 16. (original) The structure according to claim 15, wherein the first metal layer is comprised of copper.

Claim 17. (original) The structure according to claim 15, further comprising a first stop layer on the surface of the first dielectric layer with the first opening formed in the first dielectric layer and the first stop layer.

Claim 18. (original) The structure according to claim 15, further comprising:
a second dielectric layer, formed over the first dielectric layer, wherein the second dielectric layer has a second opening therein cutting through the first protective layer to expose the first metal layer;

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a second metal layer, being filled into the second opening; and
a second protective layer, formed on the surface of the second metal layer not covered by the second dielectric layer.

Claim 19. (original) The structure according to claim 18, wherein the second metal layer is comprised of copper.

Claim 20. (original) The structure according to claim 18, further comprising a second stop layer on the surface of the second dielectric layer, wherein the second opening is formed in the second dielectric layer and the second stop layer.

Claim 21. (previously presented) The structure according to claim 15, wherein the first film layer is comprised of a conductive material or a non-conductive material.

Claim 22. (previously presented) The structure according to claim 18, wherein the second protective layer is formed from a mixture of the second metal layer and a second film layer, and the second film layer is reactive with the second metal layer but non-reactive with the second dielectric layer.

Claim 23. (previously presented) The structure according to claim 22, wherein the second film layer is comprised of a conductive material or a non-conductive material.